IN THE CLAIMS:

Please amend the claims as indicated below.

1. (Currently Amended) A method of processing a circuit board having one or more optical waveguides associated therewith, the method comprising the steps of:

providing one or more etch stop layers in proximity to the one or more waveguides, at least one of the etch stop layers comprising one or more fiducials therein; and

from a surface of the circuit board, using the one or more etch stop layers to selectively remove material to provide one or more cavities having a defined positioning and depth in the circuit board, wherein said one or more cavities provide for an alignment of one or more optical elements.

2. (Original) The method of claim 1, wherein one or more of the fiducials define a positioning in a plane of the circuit board.

3. (Original) The method of claim 1, wherein one or more of the etch stop layers define a depth in the circuit board.

4. (Previously Presented) The method of claim 1, wherein at least one of the one or more cavities exposes at least a portion of the one or more waveguides.

5. (Original) The method of claim 1, wherein one or more of the etch stop layers acts as a selective etch stop.

6. (Original) The method of claim 1, wherein one or more of the etch stop layers acts as a complete etch stop.

7. (Original) The method of claim 1, wherein one or more of the etch stop layers comprises a metal.

8. (Original) The method of claim 7, wherein the metal is selected from the group consisting of copper, molybdenum, gold and combinations comprising at least one of the foregoing metals.

9. (Original) The method of claim 1, wherein one or more of the etch stop layers comprises a reflective dielectric thin film.

10. (Original) The method of claim 1, wherein the material removed comprises a substrate material.

11. (Original) The method of claim 10, wherein the substrate material is selected from the group consisting of glass, organic material, flexible organic material, polyimide and combinations comprising at least one of the foregoing substrate materials.

12. (Original) The method of claim 1, wherein the material is selectively removed using laser ablation techniques.

13. (Original) The method of claim 12, wherein the laser ablation techniques comprise use of a carbon dioxide laser.

14. (Original) The method of claim 1, wherein at least a portion of the material is selectively removed using reactive ion etching.

15. (Previously Presented) The method of claim 1, wherein one or more of the one or more cavities serve as one or more reference points to align at least one optical component with the one or more waveguides.

16. (Previously Presented) The method of claim 15, wherein the at least one optical component comprises one or more alignment pins each having a shape that corresponds with one or more of the one or more cavities.

17. (Original) The method of claim 16, wherein the alignment pins are circular.

18. (Original) The method of claim 15, wherein the at least one optical component is selected from the group consisting of opto-electronic modules, lenses, turning mirrors and combinations comprising at least one of the foregoing optical components.

19. (Previously Presented) The method of claim 1, wherein one or more of the one or more cavities serve as one or more reference points to align at least one receptacle for an optical component with the one or more waveguides.

20. (Original) The method of claim 1, wherein the circuit board has two or more waveguides associated therewith.

21. (Currently Amended) A circuit board having one or more optical waveguides associated therewith, comprising one or more cavities each with a positioning and depth defined using one or more etch stop layers located in proximity to the one or more waveguides, at least one of the etch stop layers comprising one or more fiducials therein, wherein said one or more cavities provide for an alignment of one or more optical elements.

22. (Original) The circuit board of claim 21, wherein one or more of the fiducials define a positioning in a plane of the circuit board.

23. (Original) The circuit board of claim 21, wherein one or more of the etch stop layers define a depth in the circuit board.